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10/734,211	12/15/2003	Akiko Onishi	00862.023368.	4794

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DICKERSON, CHAD S	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/734,211	ONISHI, AKIKO	
	Examiner	Art Unit	
	CHAD DICKERSON	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,15,17 and 19-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, 15, 17 and 19-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12/15/2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-12 and 15, 17 and 19-21 have been considered but are moot in view of the new ground(s) of rejection. The same references of Mori '696, Shiki '108, Gillihan '262 and Livingston '590 are still being applied. With the claim amendment, the Examiner did not find any reference in the specification that supported the function of comparing sheet sizes of front and rear faces, and therefore, this is considered as new matter. Despite the amendment containing new matter, the Examiner has introduced the reference of Shiyuuyou '426 to disclose the newly introduced claim limitation. The reference of Shiyuuyou '426 is similar to the device of Mori since both inventions involve processing information for a print job for outputting this information in the desired manner (same field of endeavor). However, in Shiyuuyou '426, the reference discloses comparing the size of the print data front face of a document to the rear face of a document. Once the system detects the larger print data size of the faces, the system chooses the larger print data face between the front and rear faces and uses this as the print data size for the job[1]. Therefore, the combination of Mori '696 with the features of Shiyuuyou '426 discloses the features of the independent claims.

Therefore, with the above features of the references listed, the claim limitations below are disclosed.

[1] See Shiyuuyou '426 at ¶ [0007]-[0014].

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-6, 15, 17 and 19-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It appears that the specification does not mention anywhere explicitly or implicitly that front and rear print sizes are compared to each other and the largest size is used as the printing data size. Since this information is not clearly conveyed in the specification to support the claim amendment, the Examiner considers this as new matter.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3, 5-9, 11, 12, 15, 17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori '696 (USP 7194696) in view of Shiki ‘108 (US Pub 2003/0094108) and Shiyuuyou ‘426 (JP Pub 11-034426).

Re claim 1: Mori '696 discloses a printing control method of converting original data into print data processible by a printing apparatus, comprising the steps of:

displaying a first setting screen to set a basic attribute applied to whole print data and (i.e. figure 14 illustrates a screen in which the whole document has document detail settings applied. The settings are considered analogous to the attributes that are applied to the print data; see fig. 14; col. 17, lines 3-55) a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond to not the front sides of printing media but to the back sides of the printing media output in the double-sided printing (i.e. as shown in figure 20C, there are a plurality of back side pages if duplex printing is designated on the book level. The chapter screen can be considered as the second screen since it is used to set attributes for the back side of a page that will be printed. Since there can be multiple pages on a single page and the single page can be a back side page, the chapter setting affecting all the pages in the chapter is able to set attributes that are applicable to the back side of a page; see figs. 20; col. 17, line 15 - col. 18, line 62);

a size of a first printable region identified by the basic attribute via the first setting screen (i.e. in Mori '696 the book attributes are also called document setting information (403), which is analogous to a basic setting applied to the whole print data. The Book attributes are applied to the attributes of all the print data pages that make up the book. One of the attributes that can be edited or changed is the Print Method attribute that

refers to the Simplex, Duplex, or Bind-ready type printing; see figs. 3-4B and 14; col. 11, lines 26-50),

a size of a second printable region identified by the back-side attribute received via the second setting screen (i.e. in Mori '696 the page attribute screen shown in figures 17 and 18, which is analogous to the back-side attribute screen, is applied to both a front and a back side of a sheet serving as a printing medium in the double-sided printing setting configured by the book attribute. Since the page attribute performs the feature of the back-side attribute setting in the above scenario requiring a single back-side sheet in a chapter with only three pages, the above claim feature is performed. Also, with the page attributes set for a plurality of pages, this if there are 6 pages that contain 3 of front and back sides, the setting of a page attribute may set both sides of the pages in accordance with a certain setting and this would perform the feature of setting a back-side attribute of back sides of sheets; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62); and

generating the print data based on the basic attribute, the back-side attribute and the original data (i.e. in a job ticket, the print data generated consists of the original data to be printed and information that corresponds to both the front and back sides of a sheet to be printed; see fig. 11; col. 15, lines 23-58).

However, Mori ‘696 fails to specifically teach a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond to not the front sides of printing media but to the back sides of the printing media.

However, this is well known in the art as evidenced by Shiki '108. Shiki '108 discloses a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond to not the front sides of printing media but to the back sides of the printing media (i.e. The reference of Shiki is similar to the device of Mori since both inventions involve processing information for a print job for output (same field of endeavor). However, in Shiki, the reference discloses setting attributes particular to different color settings of a side of each page to a certain value, which is considered as a printing attribute. Figures 8-11 display screens related to the front and back side attributes to be modified in double-sided printing. Figures 9 and 11 display attribute options to be modified specifically for the back sides of the sheets to be printed and not the front sides of the sheets; See figs. 8-11, paragraphs [0049]-[0061]).

Therefore, in view of Shiki '108, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond to not the front sides of printing media but to the back sides of the printing media, incorporated in the device of Mori '696, in order to select values for settings of front and back sides of printed sheets (as stated in Shiki '108 at paragraph [0016]).

However, the combination of Mori '696 and Shiki '108 fails to specifically teach comparing a size of a first printable region with a size of a second printable region; sending the size of the first printable region to an application when it is determined in the comparing step that the first printable region is bigger than the size of the second printable region; sending the size of the second printable region to the application when

it is determined in the comparing step that the second printable region is bigger than the size of the first printable region; and generating the print data based on the original data generated based on the sent size.

However, this is well known in the art as evidenced by Shiyuuyou '426. Shiyuuyou '426 discloses comparing a size of a first printable region with a size of a second printable region (i.e. the system of Shiyuuyou '426 is similar to the system of Mori since both involve processing a print job and outputting the job according to the desires of the user (same field of endeavor). However, the system of Shiyuuyou '426 discloses comparing the size of the print data in the front face to the size in the rear face of the presented print job; see ¶ [0007]-[0014]);

sending the size of the first printable region to an application when it is determined in the comparing step that the first printable region is bigger than the size of the second printable region (i.e. in the system, when it is determined that the first print data size of the front face is larger than the size of the rear face print data, the system sends this information to the printer engine controlled by an application that instructs the engine to print the larger determined size; see ¶ [0007]-[0014]);

sending the size of the second printable region to the application when it is determined in the comparing step that the second printable region is bigger than the size of the first printable region (i.e. in the system, when it is determined that the first print data size of the front face is not larger than the size of the rear face print data, the system sends this information to the printer engine controlled by an application that

instructs the engine to print the larger determined size corresponding to the rear face print data; see ¶ [0007]-[0014]); and

generating the print data based on the original data generated based on the sent size (i.e. in the system, once the larger size of the print data is determined, the system sends this size to the printing device controller and the controller instructs the larger size be applied to the print data; see ¶ [0007]-[0014]).

Therefore, in view of Shiyuuyou ‘426, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of comparing a size of a first printable region with a size of a second printable region; sending the size of the first printable region to an application when it is determined in the comparing step that the first printable region is bigger than the size of the second printable region; sending the size of the second printable region to the application when it is determined in the comparing step that the second printable region is bigger than the size of the first printable region; and generating the print data based on the original data generated based on the sent size, incorporated in the device of Mori ‘696, as modified by the features of Shiki '108, in order to avoid printing overflow due to a mismatch in sizes of print data (as stated in Shiyuuyou ‘426 ¶ [0004] and [0005]).

Re claim 2: The teachings of Mori '696, Shiki ‘108 and Shiyuuyou ‘426 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, the basic attribute is applied for an item other than an item having the back-side attribute (i.e. in the system,

when a higher level item, a book attribute, overlaps with a lower level item, a page attribute, the lower level item is given priority when it comes to what attribute to apply to a certain page. For instance, if a book attribute, considered as a basic attribute, overlaps in a setting with a page attribute, considered as a back-side attribute, the page attribute will be given priority and the attribute of the page will occur over the attribute of the book. Therefore, with the following example, the book attribute is applied to other pages in the document that do not have an overlapping page attribute and the feature of having the basic attribute applied to an item other than an item with a back-side attribute is performed with the following example; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62).

Re claim 3: The teachings of Mori ‘696, Shiki ‘108 and Shiyuuyou ‘426 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, the back-side attribute is applied to, as a unit, one side of the sheet serving as a printing medium (i.e. the page attribute changes the specific page that is authorized by the user. This page can be the back-side or the front side of a document, with a page attribute being applied. Also, the page attribute can be limited to a back-side of a sheet in the document that has a printing method using the duplex printing method. The sheet that has the page attribute serves as a printing medium that will be printed out once the printing is desired by the user; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 5: The teachings of Mori ‘696, Shiki ‘108 and Shiyuuyou ‘426 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, while the basic attribute and the back-side attribute are referred to, various parameters necessary to convert a page corresponding to a front side of a sheet and various parameters necessary to convert a page corresponding to a back side of a sheet are loaded in advance (i.e. before performing the conversion in the system, the settings from the book and page attributes for the front and back-side of the pages are set by the user and loaded into the system after a file is specified and opened. The attributes are considered to be the parameters that allow for the necessary conversions of data into a front and back side page and are loaded into the system in advance before the actual conversion occurs to the specified document; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 22-64, col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), and the parameters are alternately referred to in converting the pages (i.e. using both the book attributes and the page attributes, considered as the parameters, the data formed from the attributes are referred to in order to convert the pages in the user’s desired form. Each page is converted by referring to the attributes for each page, from the first page to the last page alternately, to convert each page in the desired manner; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 22-64, col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 6: The teachings of Mori ‘696, Shiki ‘108 and Shiyuuyou ‘426 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, every time a page of interest is to be converted, various parameters for use are loaded and referred to by referring to the basic attribute and the back-side attribute (i.e. when a page or pages is to be converted in the system, the attributes that contribute in forming the page of interest is loaded into the system to referred to by the printer driver in order to from the desired book or document. The settings referred to are both the book attributes and the page attributes, which are both considered as the basic and back-side settings; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 22-64, col. 9, lines 24-66 and col. 10, lines 1-30, col. 11, lines 3-50, col. 12, lines 10-62).

Re claim 7: The teachings of Mori ‘696, Shiki ‘108 and Shiyuuyou ‘426 are disclosed above.

Mori '696 discloses the method, wherein each of the setting steps comprises a sheet selection step of selecting a type of sheet serving as a printing medium, and types of sheets in the basic attribute and the back-side attribute are changed in accordance with the type of sheet selected in the sheet selection step (i.e. in the system, the chapter attribute is the attribute that affects the sheet selection. When the sheet selection is performed when setting the chapter attributes, this sheet selection changes the sheet types (i.e. A4 or A5), and that both the book attribute and the page attribute uses in the setting of their respective attributes. Also, the sheets types used in both the page and

book attributes are changed and affects the settings of both attributes. Therefore, above feature is performed; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-22, col. 11, lines 3-50, col. 12, lines 10-62).

Re claim 8: The teachings of Mori '696, Shiki '108 and Shiyuuyou '426 are disclosed above.

Mori '696 discloses the method, further comprising a step of, upon reception of a printing attribute value request from an application which generates the original data (i.e. the application (101) sends a predetermined, OS-dependent, output command to an output module of the OS which provides an interface. The output command includes data regarding print setting request that are in an original file form, but incomplete until the book editing application (104) works with the file; see fig. 1; col. 7, lines 40-65, col. 8, lines 1-67 and col. 9, lines 1-22), sending back a printing attribute value for generating original data convertible into print data corresponding to the basic attribute and the back-side attribute in the generating step (i.e. with the book editing application (104) detecting an output command and the incomplete original file, the book editing application sends back to the electronic original writer (102) directions to make the original file complete in a manner that applies the settings of the book and page attributes to the output commanded by the application (101). These applied settings allow the original data to be converted into printable and complete data for use by the printer driver for output; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-22, col. 11, lines 3-50, col. 12, lines 10-62).

Re claim 9: The teachings of Mori ‘696, Shiki ‘108 and Shiyuuyou ‘426 are disclosed above.

Mori '696 discloses the method, wherein in the setting steps, the type of sheet subjected to printing (i.e. shown in figure 15, the paper size and orientation is an example of a type of sheet subjected to printing selected. In the figures, the types of sheets may be a different size and orientation; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62) and a border-free printing attribute can be selected for the basic attribute and the back-side attribute in accordance with the selected type of sheet (i.e. with the book attribute being analogous to the basic setting, it is clear that the border line option in figure 14 reflects the choice of having a document printing with a border or a document that is border-free. Also, the page attributes are analogous to the back-side attributes since the page attributes deal with the front and back sides of sheets in the system. The page attributes can follow the attributes of the chapter and book attributes and because of this feature, the page attribute can have a border-free printing setting selected for the page attribute information in order to apply other page attribute editing to the selected page with the printing settings previously applied to a selected sheet; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), and when a type of sheet capable of border-free printing is set, a printable region of border-free printing is sent back to the application (i.e. once the user designates the option of having the page selected border-free, or no visible border line present, the editing options are sent back to the book

editing application (104) from the user's input of settings to be sent to the application (101) in order for the application (101) to be able to make use of the electronic original writer (102) in order to convert an application data into an electronic original file; see figs. 1-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 11: The teachings of Mori '696, Shiki '108 and Shiyuuyou '426 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, when the double-sided printing attribute is set in the setting steps (i.e. in the book attribute level, the system allows for the document to be formatted in the duplex, or double sided, printing method; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), original data of one page received from the application for one plane is converted into print data and output for all sheets subjected to printing (i.e. the front page or cover page of the document is received from an application (101) for the corresponding plane of the page and is converted into a print data when the book editing application (104) is used to convert the incomplete data into complete data that reflects the corresponding page of the duplex printing; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), and original data of each page received from the application for the other plane is converted into print data for the received page (i.e. the other pages that are received from the application are also converted into print data and these pages are considered to be the

other plane. In the system of Mori '696, the pages, or planes of the pages, are all sent from the application (101) and converted into data edited by the book editing application (104) to make the print job received from the application a print job that reflects certain editing desired by the user and converted into a physical form; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 12: The teachings of Mori '696, Shiki '108 and Shiyuuyou '426 are disclosed above.

Mori '696 discloses the method, wherein in the respective setting steps, the basic attribute and the back-side attribute are changed in accordance with a printing attribute designated in the application (i.e. the user designates in the application (101) an output command that reflects the output. The book editing application is used to designate printing changes in the book and page attributes in the system. The user is allowed in the system to enter in settings regarding the modifications of the document that are used to affect the front and back-end of the pages. The book editing application (104) edits the document designated by the user for output with the changes of the book and page attributes; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 15: Mori '696 discloses a printing control apparatus which converts original data into print data processible by a printing apparatus, comprising:

display unit configured to display a first setting screen to set a basic attribute to be applied to whole print data and (i.e. figure 14 illustrates a screen in which the whole document has document detail settings applied. The settings are considered analogous to the attributes that are applied to the print data; see fig. 14; col. 17, lines 3-55) a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond to the back sides of the printing media output in the double-sided printing (i.e. as shown in figure 20C, there are a plurality of back side pages if duplex printing is designated on the book level. The chapter screen can be considered as the second screen since it is used to set attributes for the back side of a page that will be printed. Since there can be multiple pages on a single page and the single page can be a back side page, the chapter setting affecting all the pages in the chapter is able to set attributes that are applicable to the back side of a page; see figs. 20; col. 17, line 15 - col. 18, line 62);

a size of a first printable region identified by the basic attribute received via the first setting screen (i.e. in Mori '696 the book attributes are also called document setting information (403), which is analogous to a basic setting applied to the whole print data. The Book attributes are applied to the attributes of all the print data pages that make up the book. One of the attributes that can be edited or changed is the Print Method attribute that refers to the Simplex, Duplex, or Bind-ready type printing; see figs. 3-4B and 14; col. 11, lines 26-50),

a size of a second printable region identified by the back-side attribute received via the second setting screen (i.e. in Mori '696 the page attribute screen shown in

figures 17 and 18, which is analogous to the back-side attribute screen, is applied to both a front and a back side of a sheet serving as a printing medium in the double-sided printing setting configured by the book attribute. Since the page attribute performs the feature of the back-side attribute setting in the above scenario requiring a single back-side sheet in a chapter with only three pages, the above claim feature is performed. Also, with the page attributes set for a plurality of pages, this if there are 6 pages that contain 3 of front and back sides, the setting of a page attribute may set both sides of the pages in accordance with a certain setting and this would perform the feature of setting a back-side attribute of back sides of sheets; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62); and

a generating unit configured to generate the print data based on the basic attribute, the back-side attribute and the original data (i.e. in a job ticket, the print data generated consists of the original data to be printed and information that corresponds to both the front and back sides of a sheet to be printed; see fig. 11; col. 15, lines 23-58).

However, Mori '696 fails to specifically teach a second setting unit configured to set the back-side attribute for the plurality of pages which correspond to not the front sides of printing media but to the back sides of the printing media.

However, this is well known in the art as evidenced by Shiki '108. Shiki '108 discloses a second setting unit configured to set the back-side attribute for the plurality of pages which correspond to not the front sides of printing media but to the back sides of the printing media (i.e. The reference of Shiki is similar to the device of Mori since both inventions involve processing information for a print job for output (same field of

endeavor). However, in Shiki, the reference discloses setting attributes particular to different color settings of a side of each page to a certain value, which is considered as a printing attribute. Figures 8-11 display screens related to the front and back side attributes to be modified in double-sided printing. Figures 9 and 11 display attribute options to be modified specifically for the back sides of the sheets to be printed and not the front sides of the sheets; See figs. 8-11, paragraphs [0049]-[0061]).

Therefore, in view of Shiki '108, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a second setting unit configured to set the back-side attribute for the plurality of pages which correspond to not the front sides of printing media but to the back sides of the printing media, incorporated in the device of Mori '696, in order to select values for settings of front and back sides of printed sheets (as stated in Shiki '108 at paragraph [0016]).

However, Mori '696 fails to specifically teach a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond to not the front sides of printing media but to the back sides of the printing media.

However, this is well known in the art as evidenced by Shiki '108. Shiki '108 discloses a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond to not the front sides of printing media but to the back sides of the printing media (i.e. The reference of Shiki is similar to the device of Mori since both inventions involve processing information for a print job for output (same field of endeavor). However, in Shiki, the reference discloses setting attributes particular to different color settings of a side of each page to a certain value, which is considered as

a printing attribute. Figures 8-11 display screens related to the front and back side attributes to be modified in double-sided printing. Figures 9 and 11 display attribute options to be modified specifically for the back sides of the sheets to be printed and not the front sides of the sheets; See figs. 8-11, paragraphs [0049]-[0061]).

Therefore, in view of Shiki '108, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond to not the front sides of printing media but to the back sides of the printing media, incorporated in the device of Mori '696, in order to select values for settings of front and back sides of printed sheets (as stated in Shiki '108 at paragraph [0016]).

However, the combination of Mori '696 and Shiki '108 fails to specifically teach a comparison unit configured to compare a size of a first printable region with a size of a second printable region; a first sending unit configured to send the size of the first printable region to an application when it is determined by said comparison unit that the first printable region is bigger than the size of the second printable region; a second sending unit configured to send the size of a second printable region to the application when it is determined by said comparison unit that the second printable region is bigger than the size of the first printable region in the comparing; and generating the print data based on the original data generated based on the sent size.

However, this is well known in the art as evidenced by Shiyuuyou '426. Shiyuuyou '426 discloses a comparison unit configured to compare a size of a first printable region with a size of a second printable region (i.e. the system of Shiyuuyou

‘426 is similar to the system of Mori since both involve processing a print job and outputting the job according to the desires of the user (same field of endeavor). However, the system of Shiyuuyou ‘426 discloses comparing the size of the print data in the front face to the size in the rear face of the presented print job; see ¶ [0007]-[0014]);

a first sending unit configured to send the size of the first printable region to an application when it is determined by said comparison unit that the first printable region is bigger than the size of the second printable region (i.e. in the system, when it is determined that the first print data size of the front face is larger than the size of the rear face print data, the system sends this information to the printer engine controlled by an application that instructs the engine to print the larger determined size; see ¶ [0007]-[0014]);

a second sending unit configured to send the size of a second printable region to the application when it is determined by said comparison unit that the second printable region is bigger than the size of the first printable region in the comparing (i.e. in the system, when it is determined that the first print data size of the front face is not larger than the size of the rear face print data, the system sends this information to the printer engine controlled by an application that instructs the engine to print the larger determined size corresponding to the rear face print data; see ¶ [0007]-[0014]); and

generating the print data based on the original data generated based on the sent size (i.e. in the system, once the larger size of the print data is determined, the system sends this size to the printing device controller and the controller instructs the larger size be applied to the print data; see ¶ [0007]-[0014]).

Therefore, in view of Shiyuuyou ‘426, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a comparison unit configured to compare a size of a first printable region with a size of a second printable region; a first sending unit configured to send the size of the first printable region to an application when it is determined by said comparison unit that the first printable region is bigger than the size of the second printable region; a second sending unit configured to send the size of a second printable region to the application when it is determined by said comparison unit that the second printable region is bigger than the size of the first printable region in the comparing; and generating the print data based on the original data generated based on the sent size, incorporated in the device of Mori ‘696, as modified by the features of Shiki '108, in order to avoid printing overflow due to a mismatch in sizes of print data (as stated in Shiyuuyou ‘426 ¶ [0004] and [0005]).

Re claim 17: Mori '696 discloses computer-readable medium storing a computer program for recording a program for converting original data into print data processible by a printing apparatus (i.e. see col. 25, line 45 – col. 26, line 32; also see figure 13), the program comprising the steps of:

displaying a first setting screen to set a basic attribute applied to whole print data and (i.e. figure 14 illustrates a screen in which the whole document has document detail settings applied. The settings are considered analogous to the attributes that are applied to the print data; see fig. 14; col. 17, lines 3-55) a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond to not the front

sides of printing media but to the back sides of the printing media output in the double-sided printing (i.e. as shown in figure 20C, there are a plurality of back side pages if duplex printing is designated on the book level. The chapter screen can be considered as the second screen since it is used to set attributes for the back side of a page that will be printed. Since there can be multiple pages on a single page and the single page can be a back side page, the chapter setting affecting all the pages in the chapter is able to set attributes that are applicable to the back side of a page; see figs. 20; col. 17, line 15 - col. 18, line 62);

a size of a first printable region identified by the basic attribute received via the first setting screen (i.e. in Mori '696 the book attributes are also called document setting information (403), which is analogous to a basic setting applied to the whole print data. The Book attributes are applied to the attributes of all the print data pages that make up the book. One of the attributes that can be edited or changed is the Print Method attribute that refers to the Simplex, Duplex, or Bind-ready type printing; see figs. 3-4B and 14; col. 11, lines 26-50),

a size of a second printable region identified by the back-side attribute received via the second setting screen (i.e. in Mori '696 the page attribute screen shown in figures 17 and 18, which is analogous to the back-side attribute screen, is applied to both a front and a back side of a sheet serving as a printing medium in the double-sided printing setting configured by the book attribute. Since the page attribute performs the feature of the back-side attribute setting in the above scenario requiring a single back-side sheet in a chapter with only three pages, the above claim feature is performed.

Also, with the page attributes set for a plurality of pages, this if there are 6 pages that contain 3 of front and back sides, the setting of a page attribute may set both sides of the pages in accordance with a certain setting and this would perform the feature of setting a back-side attribute of back sides of sheets; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62); and

generating the print data based on the basic attribute, the back-side attribute and the original data (i.e. in a job ticket, the print data generated consists of the original data to be printed and information that corresponds to both the front and back sides of a sheet to be printed; see fig. 11; col. 15, lines 23-58).

However, Mori '696 fails to specifically teach a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond not to the front sides of printing media but to the back sides of the printing media.

However, this is well known in the art as evidenced by Shiki '108. Shiki '108 discloses a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond not to the front sides of printing media but to the back sides of the printing media (i.e. The reference of Shiki is similar to the device of Mori since both inventions involve processing information for a print job for output (same field of endeavor). However, in Shiki, the reference discloses setting attributes particular to different color settings of a side of each page to a certain value, which is considered as a printing attribute. Figures 8-11 display screens related to the front and back side attributes to be modified in double-sided printing. Figures 9 and 11 display attribute

options to be modified specifically for the back sides of the sheets to be printed and not the front sides of the sheets; See figs. 8-11, paragraphs [0049]-[0061]).

Therefore, in view of Shiki '108, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of a second setting screen to set a back-side attribute to be applied to a plurality of pages which correspond not to the front sides of printing media but to the back sides of the printing media, incorporated in the device of Mori '696, in order to select values for settings of front and back sides of printed sheets (as stated in Shiki '108 at paragraph [0016]).

However, the combination of Mori '696 and Shiki '108 fails to specifically teach comparing a size of a first printable region with a size of a second printable region; sending the size of the first printable region to an application when it is determined in the comparing step that the first printable region is bigger than the size of the second printable region; sending the size of the second printable region to the application when it is determined in the comparing step that the second printable region is bigger than the size of the first printable region; and generating the print data based on the original data generated based on the sent size.

However, this is well known in the art as evidenced by Shiyuuyou '426. Shiyuuyou '426 discloses comparing a size of a first printable region with a size of a second printable region (i.e. the system of Shiyuuyou '426 is similar to the system of Mori since both involve processing a print job and outputting the job according to the desires of the user (same field of endeavor). However, the system of Shiyuuyou '426

discloses comparing the size of the print data in the front face to the size in the rear face of the presented print job; see ¶ [0007]-[0014]);

sending the size of the first printable region to an application when it is determined in the comparing step that the first printable region is bigger than the size of the second printable region (i.e. in the system, when it is determined that the first print data size of the front face is larger than the size of the rear face print data, the system sends this information to the printer engine controlled by an application that instructs the engine to print the larger determined size; see ¶ [0007]-[0014]);

sending the size of the second printable region to the application when it is determined in the comparing step that the second printable region is bigger than the size of the first printable region (i.e. in the system, when it is determined that the first print data size of the front face is not larger than the size of the rear face print data, the system sends this information to the printer engine controlled by an application that instructs the engine to print the larger determined size corresponding to the rear face print data; see ¶ [0007]-[0014]); and

generating the print data based on the original data generated based on the sent size (i.e. in the system, once the larger size of the print data is determined, the system sends this size to the printing device controller and the controller instructs the larger size be applied to the print data; see ¶ [0007]-[0014]).

Therefore, in view of Shiyuuyou ‘426, it would have been obvious to one of ordinary skill at the time the invention was made to have the features of comparing a size of a first printable region with a size of a second printable region; sending the size

of the first printable region to an application when it is determined in the comparing step that the first printable region is bigger than the size of the second printable region; sending the size of the second printable region to the application when it is determined in the comparing step that the second printable region is bigger than the size of the first printable region; and generating the print data based on the original data generated based on the sent size, incorporated in the device of Mori '696, as modified by the features of Shiki '108, in order to avoid printing overflow due to a mismatch in sizes of print data (as stated in Shiyuuyou '426 ¶ [0004] and [0005]).

Re Claim 19: The teachings of Mori '696, Shiki '108 and Shiyuuyou '426 are disclosed above.

Mori '696 discloses the method according to claim 1, wherein the instruction to decide the basic attribute via the first setting screen is issued by a user operating an OK button on the first setting screen, and the instruction to decide the back-side attribute via the second setting screen is issued by a user operating an OK button on the second setting screen (i.e. this feature is disclosed by the Mori reference since the settings of the front sides of sheets can be set by the chapter attribute shown in figures 15 and 16, and the user can set the setting of a back side of a page using figures 17 and 18. Within all of these figures contains an "*Apply*" or "*OK*" button that can be used to apply or ok the settings performed in each dialogue box. Figure 19 discloses setting a page individually from other pages and the page set individually can be a back page instead of a front side page; see figs. 14-19, col. 17, ll. 15-col. 18, ll. 62).

Re Claim 20: The teachings of Mori '696, Shiki '108 and Shiyuuyou '426 are disclosed above.

Mori '696 discloses the apparatus according to claim 15, wherein the instruction to decide the basic attribute via the first setting screen is issued by a user operating an OK button on the first setting screen, and the instruction to decide the back-side attribute via the second setting screen is issued by a user operating an OK button on the second setting screen (i.e. this feature is disclosed by the Mori reference since the settings of the front sides of sheets can be set by the chapter attribute shown in figures 15 and 16, and the user can set the setting of a back side of a page using figures 17 and 18. Within all of these figures contains an "*Apply*" or "*OK*" button that can be used to apply or ok the settings performed in each dialogue box. Figure 19 discloses setting a page individually from other pages and the page set individually can be a back page instead of a front side page; see figs. 14-19, col. 17, ll. 15-col. 18, ll. 62).

Re Claim 21: The teachings of Mori '696, Shiki '108 and Shiyuuyou '426 are disclosed above.

Mori '696 discloses the medium according to claim 17, wherein the instruction to decide the basic attribute via the first setting screen is issued by a user operating an OK button on the first setting screen, and the instruction to decide the back-side attribute via the second setting screen is issued by a user operating an OK button on the second setting screen (i.e. this feature is disclosed by the Mori reference since the settings of the front

sides of sheets can be set by the chapter attribute shown in figures 15 and 16, and the user can set the setting of a back side of a page using figures 17 and 18. Within all of these figures contains an "*Apply*" or "*OK*" button that can be used to apply or ok the settings performed in each dialogue box. Figure 19 discloses setting a page individually from other pages and the page set individually can be a back page instead of a front side page; see figs. 14-19, col. 17, ll. 15-col. 18, ll. 62).

6. Claim 4 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori '696, as modified by the features of Shiki '108 and Shiyuuyou '426, as applied to claim 1, and in further view of Gillihan '262 (USP 6842262).

Re claim 4: The teachings of Mori '696, Shiki '108 and Shiyuuyou '426 are disclosed above.

Mori '696 discloses the method, wherein in the generating step, data generated by an operating system is converted into the print data in accordance with the basic attribute and the back-side attribute while the back-side attribute is preferentially applied (i.e. whether the data is imported into the system, or the file of the document already exist, the data generated by the operating system is converted into the print data that is in accordance with the book attribute information, considered as the basic setting, and the page attribute information, considered as the back-side setting. This can occur by the user setting the appropriate settings and the conversion occurring to the document, after the appropriate settings are entered in by the user and performed by the system;

see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

However, Mori '696 fails to teach metadata.

However, this is well known in the art as evidenced by Gillihan '262. Gillihan '262 discloses metadata (i.e. As shown in figures 5 and 6, the reference of Gillihan '262 deals with document processing. This document processing is similar to the document processing of Mori '696, since both affect the output of the image data on a printing device. However in Gillihan '262, an electric document can be printed from an application program to an intermediate metafile that is stored in memory. The intermediate metafile can be edited and translated into a specific PDL in order to be printed by a printer. The metafile is considered to be the metadata since the metafile is simply data that describes some other data, which is the definition of metadata; see col. 5, lines 22-29).

Therefore, in view of Gillihan '262, it would have been obvious to one of ordinary skill at the time the invention was made to have metadata in order to have data transferred to a metafile format that can be used for printing (as stated in Gillihan '262 col. 3, lines 20-36).

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori '696, as modified by the features of Shiki '108 and Shiyuuyou '426, as applied to claims 1 and 8 above, and in further view of Livingston '590 (USP 6621590).

Re claim 10: The teachings of Mori ‘696, Shiki ‘108 and Shiyuuyou ‘426 are disclosed above.

Mori '696 discloses the method, wherein in the setting steps, monochrome printing can be selected for the basic attribute and the back-side attribute (i.e. in the system, it is clear that most printing systems offer and chose to print documents in black and white. In Mori '696, it is understood that the system chooses to print documents in black and white in order to offer the print out to a user. For both the book and page attribute information, which both are considered analogous to basic and back-side settings, it is clear that the system automatically chooses the black and white, or monochrome, printing to be selected; see figs. 1-3 and 7; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 13, lines 1-39, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62), and printing attribute is sent back to the application (i.e. the printing settings set by the user through the book and page attributes are sent back to the book editing application and these settings are used to work with the other application (101) and the electronic original writer (102) to make a complete printable document for the system to print reflecting the editing changes; see figs. 1-3 and 12-14; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 13, lines 1-39, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62).

However, Mori '696 fails to teach color printing can be selected for each of the basic attribute and the back-side attribute, and the color printing attribute is sent back to the application.

However, this is well known in the art as evidenced by Livingston '590. Livingston '590 discloses color printing or monochrome printing can be selected for each of the basic attribute and the back-side attribute, and the color printing attribute is sent back to the application (i.e. Like Mori '696, the reference of Livingston '590 is used to different document processing options to affect the output of the image data. However, Livingston '590 provides the setting for choosing color text instead of the normal black and white text. The choices of printing between the two available print color options are available. With the incorporation of this feature, once the choice is made, the color printing option in Livingston '590 can be used to be sent back to the application in the invention of Mori '696; see figs. 3-5; col. 5, lines 1-26).

Therefore, in view of Livingston '590, it would have been obvious to one of ordinary skill at the time the invention was made to have color printing or monochrome printing can selected for each of the basic setting and the back-side setting, and the color printing setting is sent back to the application in order to offer the user-selectable feature of choosing color text or using black and white text (as stated in Livingston '590 col. 5, lines 1-26).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Mori '385 (USP 7046385) discloses a book file editing system similar to Mori '385.

10. Nakajima (US Pub No 2005/0253886) discloses an ink jet, printer control unit, printer system including the same, and storage medium with the operation program of the printer control unit stored for controlling double-side printing which discloses a system shown in figure 19 that is able to modify the front and back sides of pages separately.

11. Knodt (USP 5124731) discloses a system where a job can change whether printing can occur on a front side or a rear side of a page. This printing option can be considered as an attribute of a page.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is

(571)270-1351. The examiner can normally be reached on 9:30-6:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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